

IN THE CLAIMS

1. A combination device, comprising:
 - a navigation receiver;
 - 5 a communications device integrated with the navigation receiver; and
 - a single crystal oscillator providing a reference frequency for RF-tuning, down conversion, and signal demodulation in both the navigation receiver and
 - 10 communications device;
 - wherein, other and separate crystal oscillators are not required by the navigation receiver and communications device.
- 15 2. The device of claim 1, wherein:
 - the navigation receiver supplies said reference crystal frequency to the communications device to re-use a crystal, thus eliminating the need for a communications VCO crystal.
- 20 3. The device of claim 1, wherein:
 - the navigation receiver supplies said reference crystal frequency to the communications device to avoid using an independent less-accurate crystal, wherein communications
 - 25 receiver sensitivity is improved by decreasing the frequency uncertainty and initial frequency search space.
4. The device of claim 1, wherein:
 - the navigation receiver supplies accurate frequency
 - 30 signal to the communications device to improve acquisition and tracking of VCO.

5. The device of claim 1, wherein:

the navigation receiver provides the communications device processor clock signals in nominal, and high power environments.

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6. The device of claim 1, wherein:

the navigation receiver supplies continuous frequency signals within a generation range of frequencies.

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7. The device of claim 1, wherein:

the navigation receiver supplies time event signals to a host CPU that are accurate navigation receiver time event signals.

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8. The device of claim 1, wherein:

the navigation receiver supplies time event signals in host CPU time frame via an offset from navigation receiver time.

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9. The device of claim 1, wherein:

navigation receiver supplies real-time-clock signal capabilities to a host CPU.

10. A combination mobile device, comprising:
- a mobile navigation receiver;
 - a mobile communications device integrated with the navigation receiver;
 - 5 a single crystal oscillator providing a reference frequency for RF-tuning, down conversion, and signal demodulation in both the navigation receiver and communications device, wherein, other and separate crystal oscillators are not required by the navigation receiver and
 - 10 communications device; and
 - a frequency divider connected to the navigation receiver for supplying a relatively improved derivative of said reference crystal frequency to the communications device for increased economy and performance over that of using a
 - 15 separate independent communications VCO crystal.

11. The device of claim 10, wherein the communications device is not dependent on a reference frequency being supplied from a cellular base station for its CDMA operation.